

$$\text{a} := 0 \qquad \text{b} := \frac{\pi}{2} \qquad \text{d} := \frac{\pi}{23.5}$$

$$\text{Cicle(a,b,d)} := \left| \begin{array}{l} \text{s} \leftarrow 0 \\ \text{k} \leftarrow 0 \\ \text{p} \leftarrow 0 \\ \text{for } \text{x} \in \text{a}, \text{a} + \text{d} .. \text{b} \\ \quad \text{y} \leftarrow \frac{\text{x} + 1}{\text{e}^{\text{x}} + \sin(\text{x})} \\ \quad \text{s} \leftarrow \text{s} + \text{y} \\ \quad \text{k} \leftarrow \text{k} + 1 \\ \quad \text{p} \leftarrow \text{p} \cdot \text{y} \text{ if } \text{y} > 0 \\ \left(\begin{array}{l} \text{s} \\ \text{k} \\ \text{p} \end{array} \right) \end{array} \right.$$

$$\text{Cicle(a,b,d)} = \left(\begin{array}{l} 0.665 \\ 0 \end{array} \right)$$

$$\begin{array}{l} \text{n} := 2 \\ \text{i} := 1.. \text{n} \\ \text{x}_{\text{i}} := \text{md}(\text{n} + 3) \\ \text{y}_{\text{i}} := \text{md}(\text{n} + 7) \\ \text{a}_{\text{..}} := 4 + \text{n} \\ \text{b}_{\text{...}} := 6 + \text{n} \end{array}$$

$$\text{Vector(x,n,a,b)} := \left| \begin{array}{l} \text{s} \leftarrow 0 \\ \text{k} \leftarrow 0 \\ \text{for } \text{i} \in 1.. \text{n} \\ \quad \left| \begin{array}{l} \text{s} \leftarrow \text{s} + \text{x}_{\text{i}} \\ \text{k} \leftarrow \text{k} + 1 \end{array} \right. \\ \left(\begin{array}{ll} \text{"s="} & \text{s} \\ \text{"k="} & \text{k} \end{array} \right) \end{array} \right.$$

$$\text{Vector(x,n,a,b)} = \left(\begin{array}{ll} \text{"s="} & 0.973 \\ \text{"k="} & 2 \end{array} \right)$$

$$\text{Vector(y,n,a,b)} = \left(\begin{array}{ll} \text{"s="} & 8.418 \\ \text{"k="} & 2 \end{array} \right)$$

$$\text{Iter(a,e)} := \left(\begin{array}{ll} \text{"x="} & \text{x} \\ \text{"n="} & \text{n} \end{array} \right)$$

$$\text{Iter(a,e)} := \left| \begin{array}{l} \text{x} \leftarrow \text{a} \\ \text{n} \leftarrow 0 \\ \text{while } \text{x} - \sqrt{\text{a}} > \text{e} \\ \quad \left| \begin{array}{l} \text{n} \leftarrow \text{n} + 1 \\ \text{x} \leftarrow \frac{\text{x} + \frac{\text{a}}{\text{x}}}{2} \end{array} \right. \\ \left(\begin{array}{ll} \text{"x="} & \text{x} \\ \text{"n="} & \text{n} \end{array} \right) \end{array} \right.$$

$$\text{a}_{\text{..}} := 10 \cdot 2 \qquad \text{e}_{\text{..}} := 0.01$$

$$\text{Iter(a,e)} = \left(\begin{array}{ll} \text{"x="} & 4.478 \\ \text{"n="} & 4 \end{array} \right)$$

$$\text{a}_{\text{...}} := \left(\begin{array}{l} -1.2 \\ 1.3 \\ 2.2 \\ -2.5 \\ 0.8 \\ -0.9 \\ 1.1 \\ 0.7 \\ 0.6 \\ -0.7 \\ 1 \end{array} \right) \qquad \text{S}_{\text{...}} := \left| \begin{array}{l} \text{ss} \leftarrow 0 \\ \text{for } \text{i} \in 1.. 10 \\ \quad \left| \begin{array}{l} \text{p} \leftarrow 1 \\ \text{for } \text{j} \in 1.. \text{i} \\ \quad \text{p} \leftarrow \text{p} \cdot \text{a}_{\text{i}} \\ \text{ss} \leftarrow \text{ss} + \text{p} \end{array} \right. \\ \text{ss} \end{array} \right.$$

$$\text{S} = -6.836$$

$$\text{f(x)} := \left| \begin{array}{l} \sqrt{4 - \text{x}^2} \text{ if } -2 < \text{x} < 2 \\ 0 \text{ otherwise} \end{array} \right.$$

$$\text{x} := -10, -9.99990 .. 10$$

